#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013086 Address: 333 Burma Road **Date Inspected:** 19-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Wuzhi Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

### **Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

#### **OBG TRIAL ASSEMBLY**

This QA Inspector Randomly observed the following work in progress:

SEGMENT: 7AE-Panel Point(PP)#49.

Shielded Metal Arc Welding (SMAW) welding of weld joint CA033-005. Welder is identified as 066413. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2212-TC-U4b-FCM-1.

SEGMENT: 7BE-PP#49.

Shielded Metal Arc Welding (SMAW) welding of weld joint CA036-005. Welder is identified as 066413. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2212-TC-U4b-FCM-1.

SEGMENT: 7BE-7CE

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

**SEGMENT: 7CE** 

Shielded Metal Arc Welding (SMAW) welding of Repair weld joint CA040-004. Welder is identified as 066028. ZPMC Quality Control (QC) is identified as Mr. Sun Bai Zheng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-2G (2F) FCM-Repair-1 .The repair welding was been performed against the Caltrans Engineer Approved Critical Welding Repair Report (CWR) No: B-CWR 1227 and American Bridge/Fluor (AB/F) UT report # UT-7E-032 dated: 02/28/2010.

**SEGMENT: 7AE** 

Shielded Metal Arc Welding (SMAW) welding of Repair weld joint SEG034-007. Welder is identified as 048659. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-1G (1F) FCM-Repair-1 .The repair welding was been performed against the Caltrans Engineer Approved Critical Welding Repair Report (CWR) No: B-CWR 1211 Rev. 1 and American Bridge/Fluor (AB/F) UT report # UT-7E-029R1 dated: 03/15/2010.

**SEGMENT: 7AE-7BE** 

Shielded Metal Arc Welding (SMAW) welding of Repair weld joint OBE7B-003. Welder is identified as 054467. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-SMAW-1G (1F) FCM-Repair-1. The repair welding was been performed against the Welding Repair Report (WRR) No: B-WR 11147 and ZPMC UT report # UT-B787-UT-11764 dated: 03/17/2010.

SEGMENT: 7AE PP#48.

This QA Inspector observed American Bridge/Fluor (AB/F) QA Inspector Mr.He Zhi Shun was performing Magnetic Particle Testing (MT) for Side panel T Rib Holdback fillet welds at SEGMENT: 7AE PP#48. The attached photographs provide additional detail.

SEGMENT: 7AW-PP#48.

This QA Inspector observed ZPMC MT Technician Mr.Liu Zhang Min was performing MT on base metal temporary jig removed repaired area for Deck panel at SEGMENT: 7AW- PP#48. The attached photographs provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)





## **Summary of Conversations:**

Only general conversation was held between QA and Quality Control (QC) concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer